

MSHA's Accident Prevention Program Safety Idea



"Blocking Against Motion"

Category: Maintenance Mine Type: All Mines

In the past year, seven miners died while working on equipment because safety props were not available and blocking was either not used or ineffective. All of these fatalities may have been prevented if permanently attached mechanical safety props were installed and used on the equipment.

One miner was crushed between the bucket lift arms and front-end loader frame because the loader was not effectively secured from movement. Another miner was trying to free wedged material in a hopper with the hinged gate (grizzly) temporarily propped up with a fence post. As he jarred the hopper, the fence post dislodged and the grate dropped, crushing him. In another accident, a truck driver was crushed when the bottom dump doors on a truck trailer suddenly closed while he was cleaning out the trailer.

These accidents may have been prevented if permanently mounted and hinged prop support posts were installed on the equipment. They are typically the cheapest and quickest blocking/cribbing solution for safely working under or between hinged or elevated components. If blocking and cribbing is not done correctly, it can actually create additional hazards.

In the case of the hinged gate (grizzly), a permanently mounted safety prop, similar to the mechanical prop used to secure a car hood in the open position, could have prevented the accident.

When installing a permanent hinged safety prop remember to:

- 1. Size the prop correctly.
- 2. Attach the prop to ensure that it can handle the expected load.
- 3. Design the receiving end of the prop so it cannot kick free or slip out of position when it is being deployed. (For example, provide a hole in the free end of the prop through which a pin can be inserted to secure it to a corresponding hole in the machine frame.)
- 4. Install props permanently on mobile and stationary equipment so that they are always ready to be used.

This suggestion may reduce injuries and fatalities.

